Clarion CRX97R CRX87R

RDS-EON FM/MW/LW RADIO CASSETTE COMBINATION WITH CD CHANGER CONTROL
COMBINE RADIO-CASSETTE RDS-EON/FM/PO/GO AVEC COMMANDE DE CHANGEUR CD

Owner's Guide/Manuel de l'utilisateur

R·D·S RADIO DATA SYSTEM

CD CONTROL

COMPACT disc DIGITAL AUDIO

DOLBY B NR

Illustrations in this manual show the CRX97R.
- In the cassette tape section, the Metal Tape and APC functions, and the Dolby B NR system only apply to the CRX97R.

Les illustrations dans ce manuel montrent le CRX97R.
- Dans la section cassette, les fonctions de bande métal et APC et le système de réduction de bruit Dolby B NR ne s'appliquent qu'au CRX97R.

Die Illustrationen in diesem Handbuch zeigen den CRX97R.
- Im Cassettenband-Teil beziehen sich sowohl die Metallband- und APC-Funktionen als auch das Dolby B NR-System nur auf den CRX97R.

Le illustrazioni fornite in questo libretto delle istruzioni visualizzano il modello CRX97R.
- Per quanto riguarda il capitolo sulla cassetta, la funzione di rivelazione dei nastri al metallo, la funzione APC e la funzione del sistema Dolby B NR riguardano solo il modello CRX97R.

Op de afbeeldingen in deze handleiding staat de CRX97R afgebeeld.
- In het cassettegedeelte zijn de functies Metalen Tape en APC en het Dolby B ruisonderdrukkingssysteem enkel van toepassing op de CRX97R.

Las ilustraciones en este manual muestran el modelo CRX97R.
- En la sección de tocacintas, las funciones de selector de cinta de metal, APC y Dolby B NR sólo se aplican al modelo CRX97R.

Bruksanvisningens illustrationer visar CRX97R.
- I avsnittet om kassettband gäller beskrivningen av metallband- och APC-funktionerna, samt Dolby B brusreducering endast modell CRX97R.

As ilustrações neste manual mostram o CRX97R.
- Na secção da fita de cassete, as funções da fita de metal e APC e o sistema Dolby B NR só se aplicam ao CRX97R.

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1. THEFT PREVENTION
PROTECTION CONTRE LE VOL

English

Français

1. Using the Detachable Control Panel (DCP)

The control panel of this unit can be removed to prevent theft.
Once removed, to protect it the control panel should be stored in the case provided, to prevent scratching or other damage. (Fig. 2)

■ Removing the panel

1. Switch the power OFF and press button A on the top right corner of the panel. The DCP lock will then be released. Remove the panel. (Fig. 1)
2. To replace the control panel, insert the catch on the left into the panel, and push it in firmly until it locks. (Fig. 3)

1. Utilisation du clavier de commande amovible (DCP)

Pour se protéger efficacement contre le vol de cet appareil, le clavier de commande peut être détaché.
Dès que le clavier de commande est détaché, il doit être conservé dans le coffret fourni pour le protéger contre les rayures ou autres dommages. (Fig. 2)

■ Dépose du clavier de commande

1. Eteindre l'appareil et appuyer sur la touche A sur le coin supérieur droit du clavier. Le verrouillage du clavier de commande amovible (DCP) est libéré. Déposer le clavier de commande. (Fig. 1)
2. Pour réinstaller le clavier de commande, insérer l'encoche à gauche du clavier de commande et le pousser fermement jusqu'au verrouillage. (Fig. 3)

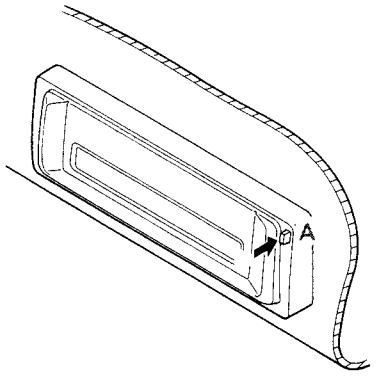


Fig. 1/Fig. 1

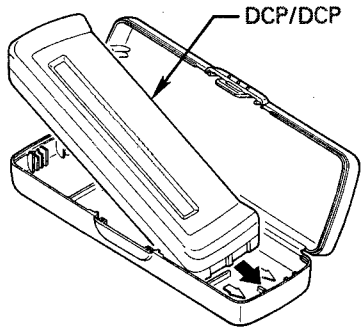


Fig. 2/Fig. 2

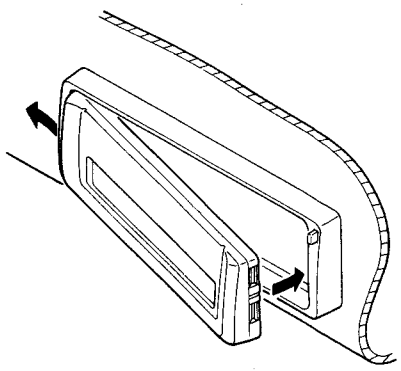


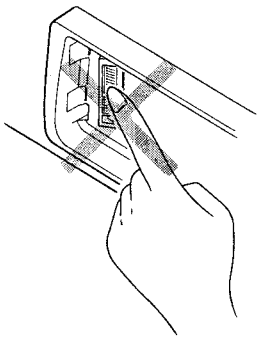
Fig. 3/Fig. 3

■ Note regarding connectors

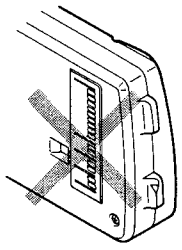
1. The connector area is extremely important. Please do not poke it with your finger or scratch it with a screwdriver. (Fig. 4)
2. Please be particularly careful to keep the DCP connector clean. If it gets dirty, remove the dirt with a dry soft cloth.

■ Remarque concernant les connecteurs

1. La zone de connecteur est extrêmement importante. Ne pas la cogner avec les doigts ou rayer avec un tournevis. (Fig. 4)
2. Faire particulièrement attention à maintenir le connecteur du clavier de commande amovible (DCP) propre. S'il est sale, retirer la saleté avec un chiffon sec et doux.



Main unit connector
Connecteur d'unité principale



DCP connector
Connecteur de DCP

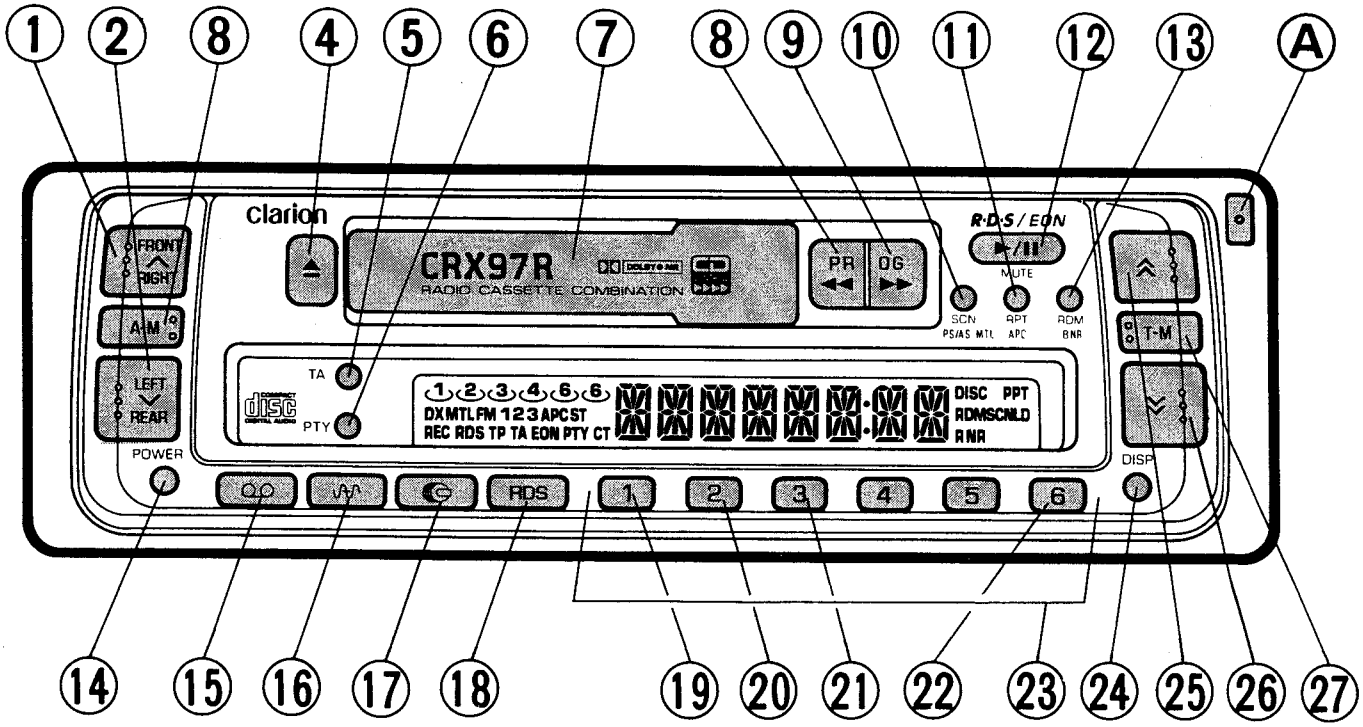
Fig. 4/Fig. 4

2. Anti-Theft Indicator

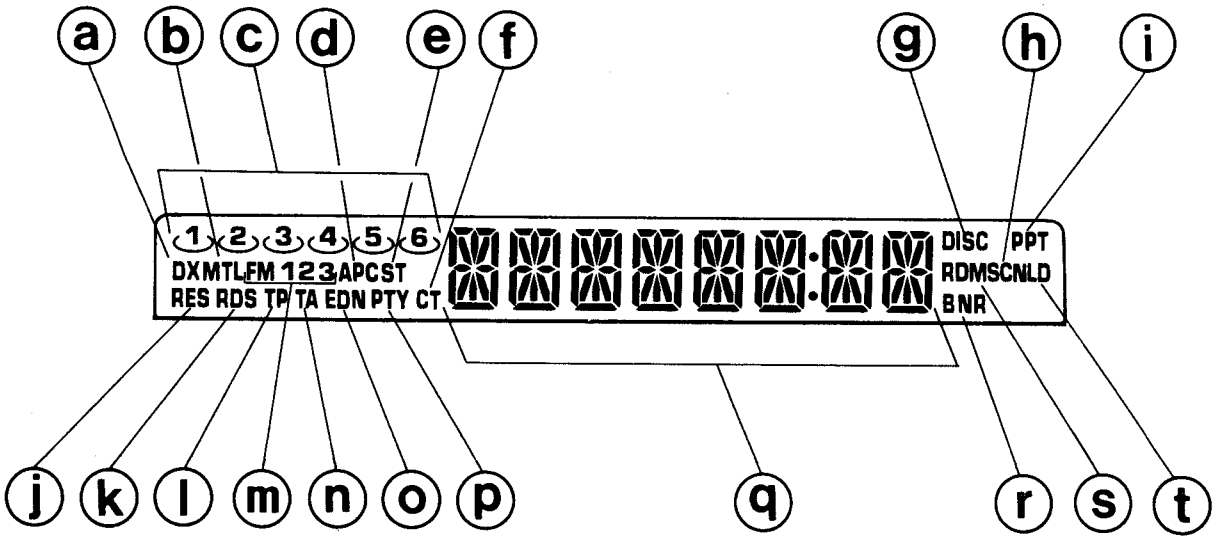
1. Press the POWER button ⑭ to turn off the power, then press the ►/II (MUTE) button ⑫ for more than 2 seconds.
2. Remove the Detachable Control Panel from the main unit, and check that the red indicator lamp is blinking. If not, reattach the panel to the main unit and repeat step 1.
3. When you reattach the DCP to the main unit and switch the power on, the red indicator lamp will stop blinking.

2. Indicateur anti-vol

1. Appuyer sur la touche d'alimentation (POWER) ⑭ pour mettre l'appareil hors circuit, puis appuyer sur la touche de sourdine ►/II (MUTE) ⑫ pendant plus de 2 secondes.
2. Déposer le clavier de commande amovible (DCP) de l'unité principale et vérifier que le voyant de l'indicateur rouge clignote. Si ce n'est pas le cas, fixer à nouveau le clavier de commande amovible à l'unité principale et répéter l'étape 1.
3. Lorsque le clavier de commande amovible (DCP) est fixé à nouveau à l'unité principale et l'appareil est mis sous tension, le voyant de l'indicateur rouge s'arrête de clignoter.


clarion
CRX97R
RADIO CASSETTE COMBINATION
R·D·S / EON
MUTE
SCN
PS/AS MTL
RPT
APC
RDM
BNR
PR
DG
FRONT
RIGHT
LEFT
REAR
A·M
T-M
DISP
POWER
TA
PTY
RDS
DX MTL FM 1 2 3 APC ST
REC RDS TP TA EON PTY CT
DISC PPT
RDM SCN LD
B NR

■ DISPLAY


DX MTL FM 1 2 3 APC ST
RES RDS TP TA EON PTY CT
DISC PPT
RDM SCN LD
B NR

2. OPERATION

① Up Button (^)
② Down Button (v)
③ Audio Mode Button (A-M)/Loudness Selector Button
④ Eject Button (⏏)
⑤ Traffic Announcement Button (TA)
⑥ Programme Type Button (PTY)
⑦ Cassette Tape Slot Door
⑥, ⑨ Fast Forward and Rewind (◄◄, ►►)/ Programme Button (PROG)
⑩ Preset Scan and Auto Store (PS/AS)/Metal Tape Selector [CRX97R only]/Scan Button (SCN)
⑪ Automatic Programme Control Button (APC) [CRX97R only]/Repeat Play Button (RPT)
⑫ Audio Muting Button (MUTE)/Play and Pause Button (►/II)
⑬ Dolby B NR Button [CRX97R only]/Random Play Button (RDM)
⑭ POWER Button
⑮ Tape Mode Selector Button (QO)
⑯ Tuner Mode Selector Button/Band Selector Button (∿)
⑰ CD Changer Mode Selector Button ( )
⑱ RDS/Regional Select Button
⑲ Function Button 1
⑳ Function Button 2
㉑ Function Button 3
㉒ Function Button 6
㉓ Preset Buttons/Direct Disc Buttons
㉔ Display Mode Selector Button/Illumination Selector Button
㉕ Up Tuning Button/Programme Type Select Button/Search Control Up Button
㉖ Down Tuning Button/Programme Type Select Button/Search Control Down Button
㉒ Tuning Mode Selector Button (T-M) /DX/ LOCAL Button

Ⓐ DCP Release Button

■ DISPLAY

ⓐ DX Indicator
ⓑ Metal Tape Indicator (MTL) [CRX97R only]
ⓒ Preset Channel Indicators/Magazine Disc Indicators
ⓓ Automatic Programme Control Indicator (APC) [CRX97R only]
ⓔ Stereo Reception Indicator (ST)
ⓕ Clock Time Indicator (CT)
ⓖ DISC Indicator
ⓗ Scan Indicator (SCN)
ⓘ Repeat Play Indicator (RPT)
ⓙ Regional Indicator (REG)
ⓚ RDS Indicator
ⓛ Traffic Programme Indicator (TP)
ⓜ FM Band Indicators (FM 1, 2, 3)
ⓝ Traffic Announcement Indicator (TA)
ⓞ EON Indicator
ⓟ Programme Type Indicator (PTY)
ⓠ Display Area
ⓡ Dolby B NR Indicator [CRX97R only]
ⓢ Random Play Indicator (RDM)
ⓣ Loudness Indicator (LD)

English

2-1. Controlling the Sound & Oeneral Operation

CAUTION!

Turning the ignition on or turning the POWER button on with the volume control at the maximum position can damage your ears.

* **POWER Button** ☛ ⑭

* **Audio Mode (A-M)/Loudness Selector Button** ☛ ③

  Press the A-M button ③, to select the adjustment mode. The adjustment mode changes in the following order:
  Volume → Bass → Treble → Balance → Fader → Volume

  - **Loudness ON/OFF**
    When you press the A-M button ③ for more than 2 seconds, loudness is turned on, and the **"LD"** indicator ⓣ lights up. To turn loudness off, press the button again for more than 2 seconds.

* **Audio Control Up Button** ☛ ①
  Audio Control Down Button ☛ ②

☆ **Changing the Illumination Colour**
Holding down button ㉔, press button ⑲. Choose amber or green, as you prefer.

☆ **Setting the DSP mode**
If you have a Digital Sound Processor (DSP) connected to your unit, you must carry out this setting without fail. Turn the volume to MAX (Vo33). Holding down button ㉔, press button ⑳. The adjustments of the volume and tone are carried on the Digital Sound Processor.

☆ **Setting the Equalizer Mode**
If you have an Equalizer or a Digital Sound Processor with a built-in equalizer connected to your unit, you must carry out this setting without fail. Holding down butten ㉔, press button ㉑. The bass/treble adjustment is carried out on the equalizer.

☆ **Triggered Audio Mute for Cellular Telephenes**
When a telephone call is received, **"TEL"** appears on the display, and muting is applied. When you hang up the phone, the previous mode becomes operative again.

■ Audio Mode Indications and Description of Operation

Audio Control Up/Down Buttons / Audio Mode	LEFT ⇩ REAR	Center Position	FRONT ⇧ RIGHT	Description of Operation
VOL (volume adjustment)	VOL 00	VOL 09 **Note 3** (initial setting)	VOL 33	The volume decreases as the numbers decrease, and increases as the numbers increase.
BASS (bass adjustment)	BASS -7 (negative indication)	BASS 0	BASS +7	The bass sound is attenuated as the numbers decrease from the center position, and emphasized as the numbers increase. (The range is from −7 to +7.)
TREB (treble adjustment)	TREB -7 (negative indication)	TREB 0	TREB +7	The treble sound is attenuated as the numbers decrease from the center position, and emphasized as the numbers increase. (The range is from −7 to +7.)
BAL (left/right balance adjustment)	BAL L 15 (Balance Left)	BAL 00	BAL R 15 (Balance Right)	The sound of the left speaker(s) is emphasized when the display switches from **"BAL 00"** (Balance) to **"BAL L"** (Balance Left), and the sound of the right speaker(s) is emphasized when the display switches from **"BAL 00"** (Balance) to **"BAL B"** (Balance Right).
FAD (front/rear balance adjustment)	FAD R 15 (Fader Rear)	FAD 00	FAD F 15 (Fader Front)	The sound of the rear speaker(s) is emphasized when the display switches from **"FAD 00"** (Fader) to **"FAD R"** (Fader Rear), and the sound of the front speaker(s) is emphasized when the display switches from **"FAD 00"** (Fader) to **"FAD F"** (Fader Front).

Note 1: In the balance and fader adjustment modes, the actual steps and the steps indicated on the display do not match due to the large number of steps.
Note 2: The original display reappears approximately 5 seconds after the adjustments in the various audio modes.
Note 3: The various modes are set to the following values when the power is first turned on after the set is installed in the car: VOL 09, BASS 0, TREB 0, BAL 00 and FAD 00.

2-2. Listening to the Radio

* **Tuner Mode Soloction/Band Soloction Button** ☛ ⑯
  - **Tuner Modo Soloction**
    Press button ⑯ to set the tuner mode.
  - **Band Selection**
    When you press button ⑯, the reception band changes in the following order:
    FM1 → FM2 → FM3 → L/M → FM1
    (FM1, FM2 and FM3 are on the same reception frequency band.)

* **Tuning Modo Seloctor Button (T-M)** ☛ ㉗
  Press the T-M button ㉗ so that **"MAN"** appears on the display. The manual tuning mode is now set. Tune into a station by pressing button ㉕ or button ㉖. Unless you press button ㉕ or button ㉖ within 5 seconds of switching to the manual tuning mode, the unit will return to the seek tuning mode.
  - **Manual Tuning**
    During FM reception, the frequency changes in steps of 0.05 MHz. On MW, it changes in steps of 9 kHz, and on LW, in steps of 1 kHz.
    1. Press the T-M button ㉗ to set the manual tuning mode.
    2. When you press button ㉕, the frequency increases, and when you press button ㉖, it decreases. (If you hold either button down, the frequency changes continuously.)
  - **Seek Tuning (Local/DX)**
    There are two sensitivity levels for seek tuning: DX seek, which will tune in any broadcasting stations which can be received, and Local seek, where only those stations with a sufficiently strong signal, i.e. local stations, can be tuned in.
    <DX Seek>
    1. Check that the **"DX"** indicator ⓐ is lit. If not, press button ㉗ for more than 2 seconds.
    2. Press button ㉕ to tune toward higher frequencies and press button ㉖ to tune toward lower frequencies. Tuning will stop when a broadcast station is received.

    <Local Seek>
    1. Press button ㉗ for more than 2 seconds. The **"DX"** indicator ⓐ will disappear and **"LO"** will be displayed for a short time and then disappear.
    2. Press button ㉕ to tune toward higher frequencies and press button ㉖ to tune toward lower frequencies. Tuning will stop when a broadcast station with a strong signal is received.

* **MUTE Button** ☛ ⑫
  Press button ⑫ to instantly mute the sound. Press it once more to release muting.

* **Prosot Buttons 1, 2, 3, 4, 5 and 6** ☛ ㉓
  By pressing a Preset button you can instantly recall a station which has been stored in memory.
  ★ When calling a broadcasting station, unless you release the Preset button within 2 seconds, the displayed frequency will be stored at the Preset button, so be careful.

☆ **Storing Stations in tho Prosot Momory**
6 radio stations can be stored in memory for each band.
1. Press button ⑯ to select the reception band.
2. Press button ⑩ for more than 2 seconds to store stations automatically in the memory (Auto Store). If less than 6 stations are stored in this process, or if you want to store a broadcasting station with a weak signal, carry out the following steps.
3. Tune in the broadcasting station using Manual Tuning.
4. Press the desired Preset button for more than 2 seconds. The sound will go off when you press the button, and when it comes on again, the station has been stored.

* **Proset Scan/Auto Store Momory Button** ☛ ⑩
  - **Prosot Scan**
    Press button ⑩. The broadcasting stations stored at Preset buttons 1 to 6 will be received in order for **5** seconds each. When you press button ⑩ again, or press one of the Preset buttons 1 to 6, this mode will be released. (When the unit is receiving on FM, all the stations stored in FM1, FM2 and FM3 will be received in order.)
    ★ If you press button ⑩ for more than 2 seconds, the Auto Store memory mode will become operative. All the stations stored in the memory so far will be cleared, and new ones will be stored instead, so be careful.
  - **Auto Storo Momory**
    6 strong-signal broadcasting stations can be stored automatically for each band. (See "Storing Stations in the Preset Memory".)
    ★ Stations previously stored in the preset memory are cleared when new ones are stored using Auto Store.

☆ **Storoo Rocoption Indicator**
When a stereo broadcast is received, the **"ST"** indicator ⓔ lights up.

English

2-3. RDS (Radio Data System) Operation

*** RDS Button ☛ ⑱**

Set the RDS mode by pressing the RDS button ⑱, so the **"RDS"** indicator ⓚ lights up. When you press the button again, this mode is released.

1. When an RDS station is received, the programme name is displayed. (PS: Programme Service Name)
2. If an emergency broadcast is received while an RDS station is being received, **"ALARM"** is displayed. The volume of the emergency broadcast is automatically set at the pre-set value.
3. If good reception of the RDS broadcast becomes impossible in your present location, the **"RDS"** indicator ⓚ starts blinking.
4. When seek tuning is carried out in the RDS mode, only stations broadcasting an RDS signal will be received.
5. • **Preset Scan in RDS Mode**
   When you press the PS button ⑩, Preset Scan will be carried out only on the RDS stations among the preset stations.
   • **Auto Store in RDS Mode**
   When you press the AS button ⑩ for more than 2 seconds, only RDS stations will be stored on the Preset buttons.

☆ Same-Programme Search (PI: Programme Identification)

Press the Preset button ㉓ on which an RDS station has been stored, and if this station is not received (the **"RDS"** indicator ⓚ is blinking), press the same Preset button again. **"SEARCH"** will be displayed and a station broadcasting the same programme will be received.

(The PI code will be displayed for about 5 seconds if you hold down the RDS button ⑱ and press function button 1 ⑲ at the same time.)

☆ Regional Programme Function (REG)

REG ON (REG indicator lit):

Only local (regional) radio broadcasts in the local area will be sought.

REG OFF (REG indicator off):

If you are receiving a regional station in a certain area and you enter a different area, the regional station for that area will be received. In the RDS mode, the REG function will turn on/off each time you press the RDS button ⑱ for more than 2 seconds.

☆ RDS EON (Enhanced Other Networks Information)

When EON data is received for an RDS broadcast, the **"EON"** indicator ⓞ will light up.

1. If you are waiting to receive traffic information, and the **"EON"** indicator lights up, traffic information will be broadcast when the traffic information begins, even if it is on a different station to the one you are currently receiving.
2. When the **"EON"** indicator is lit, if you press a Preset button ㉓, the station with the best signal in that area will be received instantly.

★ Certain countries and certain stations do not transmit EON data.

☆ Music/Speech Function (MS)

This function automatically turns loudness off to make it easier to hear speech broadcasts.

If you hold down the RDS button ⑱ and press the Preset button 6 ㉒ for less than 2 seconds, this function will be set and **"MS ON"** will be displayed. Loudness will be switched on/off according to the received data from the broadcasting station. When you repeat the operation, this function will go OFF and **"MS OFF"** will be displayed.

★ Some broadcasting stations do not transmit Music/Speech data.

*** PTY (Programme Type) Button ☛ ⑥**

The PTY function enables you to give the selected PTY broadcast listening priority when it begins.

When you press button ⑥ after selecting the desired Programme type (PTY), the **"PTY"** indicator ⓟ lights up and the PTY broadcast wait state becomes operative.

When you press button ⑥ again, the PTY wait state is released. However, if you press this button during a PTY broadcast, the PTY broadcast is cancelled and the PTY broadcast wait state becomes operative again.

When the selected PTY broadcast is received, it is reproduced on your unit.

★ In the traffic information wait state, traffic information broadcasts have priority over PTY broadcasts.

★ During a PTY broadcast, the display will change in the following order each time you press the DISP button ㉔:
PTY name → PS name → clock display (CT) → PTY name

☆ PTY Selection Method

1. Press the PTY button ⑥ for more than 2 seconds.
2. Select the desired programme type (PTY) using the tuning up/down buttons ㉕ and ㉖.

3. After PTY selection, press the PTY button ⑤. The PTY broadcast wait state will then become operative.

☆ **PTY Storage, Calling and Checking Method**

1. After carrying out PTY selection, press a Preset button ㉓ for more than 2 seconds. (6 settings can be stored.)
2. When the PTY display blinks, the storage process is complete.
3. To call up a stored setting, press the PTY button for more than 2 seconds, then press the desired Preset button ㉓.

★ If you press the PTY button for more than 2 seconds, the PTY select mode will be set, so be careful.

✱ **TA (Traffic Announcement) Button ☛ ⑤**

When traffic information begins, this is given top listening priority.

When you press the TA button, the **"TA"** indicator ⓝ lights up, and a traffic information station is sought. If such a station is found, the **"TP"** indicator ⓘ lights up, and the traffic information wait state becomes operative. When you press the TA button again, this state is released.

If you press the TA button while listening to traffic information, the traffic information broadcast is cancelled and the traffic information wait state becomes operative again.

If no traffic information station is found, **"NO TRA"** is displayed, so you then press the TA button to release the state. Traffic information is automatically reproduced at the preset volume.

1. When the traffic information begins, **"TRA INFO"** is displayed for about 5 seconds, after which the PS (Programme Service Name) or frequency is displayed. Also, if the traffic information begins while the clock (CT: Clock Time and Date) is being displayed, the clock display reappears after the **"TRA INFO"** display.
2. While you are listening to traffic information, loudness is turned OFF.
3. The table below shows what happens when the DISP button ㉔ is pressed in certain display states.

Display before button is pressed	Display after button is pressed
TRA INFO	PS or CT
PS	TRA INFO
CT	PS

4. Even if the **"TA"** indicator ⓝ is lit, when a station not broadcasting traffic information is being received, a traffic information station will be sought when you press the TA button.
5. • Preset Scan when **"TA"** Indicator ⓝ is Lit:
   When you press the PS button ⑩, only stations broadcasting traffic information will be covered by the Preset Scan.
   • Auto Store when **"TA"** indicator ⓝ is Lit:
   If you press the AS button ⑩ for more than 2 seconds, only stations broadcasting traffic information will be auto stored.

☆ **Traffic Information and Emergency Broadcast Volume Setting Method**

1. Press the TA button for more than 2 seconds.
2. Adjust the volume using the buttons ① and ②.
3. If you press any button other than ① or ②, and take no other action for 5 seconds, the previous state will become operative again.

☆ **Time Display Function (CT: Clock Time and Date)**

In areas where CT data is broadcast, the time can be displayed.

When CT data is received, the **"CT"** indicator ⓕ lights up.

When you press the DISP button ㉔, the time is displayed. If you press this button again or else press the mode selector button, the original display will reappear.

★ Certain countries and certain broadcasting stations do not broadcast CT data. Also, depending on the area, the time may be incorrectly displayed, so be careful.

English

English

2-4. Listening to Cassette Tapes

☆ **Cassette Tape Playback**
Insert the cassette tape horizontally so that side where the tape can be seen is on the right.

✱ **Tape Mode Selector Button ☛ ⑮**
When you press button ⑮, **"TAPE"** is displayed, and tape playback begins. If no cassette tape has been inserted, **"NO TAPE"** will be displayed.

✱ **Play/Pause Button ☛ ⑫**
Each time you press button ⑫ playback begins or pauses.

✱ **Eject Button ☛ ④**
When you press button ④, the cassette tape is ejected. If you eject the tape while it is being played, the tuner mode is set.

✱ **Fast Forward and Rewind/Programme Selector Buttons ☛ ⑧, ⑨**

- **Using Fast Forward/Rewind**
  1. During top side playback (playback direction is toward the right):
     Fast forward: Press button ⑨ until it locks.
     Rewind: Press button ⑧ until it locks.
  2. During bottom side playback (playback direction is toward the left):
     Fast forward: Press button ⑧ until it locks.
     Rewind: Press button ⑨ until it locks.
  3. Release
     Press the opposite button – either ⑧ or ⑨. The mode can also be released by pressing the Tape Mode Selector button ⑮ or the Play/Pause button ⑫.

  ★ **"FF/REW"** is displayed during fast forwarding and rewinding of the tape.

- **Changing the Programme (Running Direction)**
  When you press buttons ⑧ and ⑨ simultaneously, the tape playback direction will change.

☆ **Radio Monitor**
A press of button ⑯ while the deck is in the fast forward or rewind mode will allow you to listen to the radio.

☆ **APC (Automatic Programme Control) ☛ ⑪ [CRX97R only]**

1. Press button ⑪. The **"APC"** indicator ⓓ will light up.
2. During top side playback (playback direction is toward the right):
   When you press button ⑧, the tape will rewind to the beginning of the track being played.
   When you press button ⑨, the tape will fast-forward to the beginning of the next track.
3. During bottom side playback (playback direction is toward the left):
   When you press button ⑧, the tape will fast-forward to the beginning of the next track.
   When you press button ⑨, the tape will rewind to the beginning of the track being played.

   ★ Depending on the point at which the button is pressed, the tape may rewind to the beginning of the previous track, or fast-forward 2 tracks.
4. Release
   Press button ⑪.

★ APC cannot be used on the kinds of tapes listed below. If APC fails to function when such a tape is being played, it does not mean that the unit is faulty.

- Tapes with a low recording level
- Tapes on which the non-recorded sections between the tracks are shorter than 4 seconds
- Tapes with long pauses during tracks
- Tapes with noise recorded between tracks

✱ **Metal Tape Button ☛ ⑩ [CRX97R only]**
Use this button to select the proper equalization for the type of tape being used.

✱ **Dolby B NR Button ☛ ⑬ [CRX97R only]**
When playing a tape recorded with Dolby Noise Reduction, press button ⑬ so that the **"B NR"** indicator ⓡ lights up. When you press this button again, the setting is released.

- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
- "DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

2-5. Operating a CD Changer

You can connect a CD changer (sold separately) to this unit to enjoy CD playback.

* **CD Changer Mode Selector Button** ☛ ⑰
  Press button ⑰. The disc number ⓒ and track number will appear on the display, and playback will start.
  ★ If CD playback does not start, the reason will appear on the display. For details, see page ⓮.

☆ **Last Position Memory**
Before the power is switched off, and before changing to another mode, this unit stores the setting for the track which was being played last. When playback is resumed, it starts with this track.
★ When the magazine is replaced, the stored setting for the track previously played is erased.

* **Play/Pause Button** ☛ ⑫
Each time you press button ⑫, playback begins or pauses.

* **Disc Up Search Button** ☛ ⑰
When you press button ⑰, the next disc starts playing. Each time you press this button, the unit moves on to the next disc, in order. If 6 discs have not been loaded in the magazine, the empty disc numbers are skipped.

* **Direct Disc Buttons** ☛ ㉓
When you press button ㉓ (1 to 6), the disc corresponding to the button which was pressed is played. If you press the button for the disc number currently playing, the unit will return to the first track on the disc.

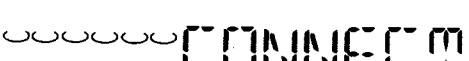
* **Search Control Up Button** ☛ ㉕**/Search Control Down Button** ☛ ㉖
  - **Track Number Search**
    When you press button ㉕, the track number goes up, and when you press button ㉖, the track number goes down. The track number is shown on the display.
  - **Cueing/Reviewing (high-speed playback)**
    Press button ㉕ for cueing and button ㉖ for reviewing.

* **Repeat Play Button** ☛ ⑪
The repeat function consists of Track Repeat, which plays one track repeatedly, and Disc Repeat, which plays one disc repeatedly.
  - **Track Repeat**
    Press button ⑪. The **"RPT"** indicator ⓘ lights up, and the track currently playing is played over and over again. When you press the button again, this mode is released.
  - **Disc Repeat**
    Press button ⑪ for more than 2 seconds. The **"DISC"** indicator ⓖ and the **"RPT"** indicator ⓘ light up, and the disc currently playing is played over and over again. When you press the button again, this mode is released.

* **Scan Button** ☛ ⑩
Press this button to play the first 10 seconds CD tracks.
The scan function consists of Track Scan, which plays a bit of each track on the disc, and Disc Scan, which plays a bit of the first track on the disc and then moves on to the next disc.
  - **Track Scan**
    Press button ⑩. The **"SCN"** indicator ⓗ lights up, and track scan begins. When you press the button again, this mode is released and playback continues. When it has finished playing the first bit of the last track, Track Scan moves on to the next disc and continues from there.
  - **Disc Scan**
    Press button ⑩ for more than 2 seconds. The **"DISC"** indicator ⓖ and the **"SCN"** indicator ⓗ light up, and Disc Scan begins. When you press the button again, this mode is released and playback continues.

* **Random Play Button** ☛ ⑬
The Random Play function consists of normal Random Play, which selects and plays tracks at random from one disc, and Disc Random Play, which selects and plays tracks at random from among all the discs in the magazine.
  - **Random Play**
    Press button ⑬. The **"RDM"** indicator ⓢ lights up, and random play begins. When you press this button again, this mode is released. When the unit has finished playing all the tracks on the disc, it moves on to the next disc and starts random play on that disc.
  - **Disc Random Play**
    Press button ⑬ for more than 2 seconds. The **"DISC"** indicator ⓖ and the **"RDM"** indicator ⓢ light up, and random play of all tracks on all discs begins. When you press the button again, this mode is released.
  ★ Tracks are selected at random, so the same track may be played more than once.

■ Typical Displays in CD Changer Mode

Sutton No. and Mode of Operation		Display	Explanation of tha Display
When mode changes			Displayed when the CD changer is net connected (wrongly wired, for example)
			Displayed when the magazine is not set in the CD changer
			Displayed when no CD has been inserted in the magazine
⑩	During Disc Scan		**"D-SCAN"** displayed
⑬	During Disc Random Play		**"D-RANDOM"** displayed

3. CASSETTE PRECAUTIONS AND CARE

1. Slack tape can lead to operating difficulties. Remove tape slack before inserting a cassette, particularly when using C-90 or prerecorded cassettes.
2. Use C-30 to C-90 cassettes. Avoid use of C-120 or longer cassettes. (The very thin tape may stretch or break.)
3. Clean the head periodically with a good commercial head cleaner. Avoid touching the head with magnetic or hard objects.
4. Do not oil the cassette mechanism.
5. Always remove the cassette from the mechanism when not in use. Exposure to direct sunlight, extreme temperatures or high humidity may damage cassettes.

English

Français

Deutsch

Italiano

3. PRECAUTIONS A PRENDRE AVEC LA CASSETTE ET ENTRETIEN

1. Une bande relâchée peut provoquer des problèmes. Tendre la bande avant d'insérer une cassette, en particulier lors de l'utilisation de cassettes C-90 ou des cassettes préenregistrées.
2. Utiliser des cassettes C-30 à C-90. Eviter d'utiliser des cassettes C-120 ou des cassettes de plus longue durée. (La bande très mince peut s'étirer ou se casser.)
3. Nettoyer la tête périodiquement avec un bon produit de nettoyage de tête. Eviter de toucher la tête avec des objets magnétiques ou rigides.
4. Ne pas mettre de graisse dans le mécanisme.
5. Toujours enlever la cassette lorsque l'appareil n'est pas utilisé. Une exposition en plein soleil, aux températures extrêmes ou à un taux d'humidité élevé peut endommager les cassettes.

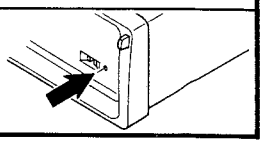
3. PFLEGE DER CASSETTEN UND HINWEISE

1. Das lose Band in einer Cassette kann zu Betriebsstörungen führen. Entfernen Sie das Lose des Bandes, ehe Sie die Cassette einlegen. Dieses ist besonders wichtig, wenn Sie C-90 Cassetten oder bespielte Cassetten verwenden.
2. Benutzen Sie Cassetten der Gruppe C-30 bis C-90. Vermeiden Sie C-120 oder längere Cassetten. (Diese sehr dünnen Bänder können sich dehnen oder reißen.)
3. Reinigen Sie den Tonkopf in regelmäßigen Abständen mit handelsüblichen Reinigungsmitteln. Berühren Sie den Tonkopf nicht mit einem Magneten oder mit kratzenden Gegenständen.
4. Ölen Sie den Cassettenmechanismus nicht.
5. Nehmen Sie die Cassette nach dem Spielen immer aus dem Gerät heraus. Direktes Sonnenlicht, extreme Temperaturen oder hohe Luftfeuchtigkeit können die Cassetten beschädigen.

3. PRECAUZIONI E CURA DELLA CASSETTA

1. Un nastro lento può causare difficoltà di operazione.
   Stringete il nastro prima di inserire la cassetta, specialmente se usate una cassetta C-90 oppure una cassetta preregistrata.
2. Usate delle cassette da C-30 a C-90. Evitate di usare cassette del tipo C-120 o maggiori. (Il nastro estremamente sottile contenuto in esse si allunga e si spezza facilmente.)
3. Pulite la testina regolarmente con un buon prodotto di pulizia delle testine. Evitate di toccare la testina con oggetti magnetici o duri.
4. Non lubrificate il meccanismo dell'unità.
5. Rimuovete sempre la cassetta dall'unità quando non è in uso. L'esposizione alla luce diretta del sole, a temperature estreme o ad un alto tasso di umidità potrebbe causare danni alle cassette.

4. TROUBLESHOOTING

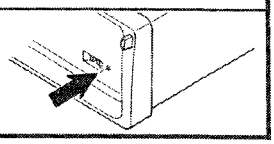
Problem	Cause	Remedy
The power will not come on (no sound produced).	The fuse has blown.	Replace the fuse with a new one which has the same capacity as the old one (in the case of this unit, 10 A). If the new fuse blows, consult your dealer.
	The wiring is incomplete.	Read the wire connection instructions again, and correct the wiring.
The sound quality is poor.	The head is dirty.	Clean the head using a cleaning tape.
	The Dolby B NR button has not been pressed.	When using a tape recorded with Dolby noise reduction, press the Dolby B NR button.
When you press a button, it does not have the desired effect, and the appropriate display does not appear.	The microcomputer is malfunctioning due to noise interference or some other cause.	Press the Reset button for about 2 seconds using the tip of a pen or a similar object. 

■ To protect the system, this unit has a self-diagnostic function. If a fault occurs, the unit will inform you by displaying one of a range of error messages. Eliminate the fault by following the "What To Do" instructions.

Error message	What To Do
HHHH	Playback automatically stops and this message is displayed when the unit is in the CD changer mode and the CD changer's internal temperature rises. →Cool the area around the CD changer and wait a while.
ERROR 1	This error message is displayed when the unit is in the CD changer mode and the built-in battery in the CD changer has run down. →Consult your dealer.
ERROR 2	This error message is displayed when the unit is in the CD changer mode and a fault has occurred in the CD changer mechanism (it cannot carry out a disc change, for example). →The fault is likely to lie in the CD changer mechanism, so consult your dealer.
ERROR 3	This error message is displayed during playback in the CD changer mode, when the pickup focus is incorrect, due to a scratched disc, for example. →Check the disc in the magazine.
ERROR 6	This error message is displayed when the disc in the magazine has been inserted upside-down. →Check the disc in the magazine.

※ When the error code displayed on your unit is not one of those listed above, consult your dealer, quoting the code.

4. DEPISTAGE DES PANNES

Symptôme	Cause probable	Remède
Pas d'alimentetion (aucun son n'est produit)	Le fusible a sauté	Remplacer le fusible par un fusible de même ampérage que l'ancien fusible (utiliser un fusible de 10 A pour cet appareil). Si le fusible saute à nouveau, consulter le revendeur.
	Le câblage est incorract.	Relire les instructions de câblage et corriger le câblage.
La qualité sonore est mauvaise.	La tête est sale.	Nettoyer la tête avec une cassette de nettoyage.
	La touche de réduction de bruit Dolby B NR n'a pas été enfoncée.	Lors de l'utilisation d'une cassette enregistrée avec la réduction de bruit Dolby, appuyer sur la touche Dolby B NR.
Lersqu'une touche est enfoncée, elle ne donne pas l'effet désiré et l'affichage approprié n'apparaît pas.	Le micro-processeur fonctionne mal en raison de parasites ou pour une autre reison.	Appuyer sur la touche de remise à zéro pendant 2 secondes environ en utilisant la pointe d'un stylo ou un objet similaire. 

■ Peur la protection du système, cet appareil est équipé d'un système d'auto-diagnostic. Si un problème se présente, un message d'erreur est affiché. Appliquer les remèdes indiqués dens le section "Remède" pour résoudre le problème.

Message d'arrour	Remède
HHHH	La lecture s'arrête automatiquement et ce message est affiché lorsque l'appareil ost en mode de changeur CD et lorsque la température interne du changeur de CD est très élevée. →Refroidir l'endroit autour du changeur de CD et attendre un moment.
ERROR 1	Ce message d'erreur est affiché lorsque l'appareil est en mode de changeur CD et lorsque la batterie à l'intérieur du changeur de CD est épuisée. →Consulter votre revendeur.
ERROR 2	Ce message d'erreur est affiché lorsque l'appareil est en mode de changeur CD et lorsqu'un problème s'est présenté avec le mécenisme du changeur de CD (les disques ne peuvent pas être changés, etc.) →Le mécanisme de changeur de CD peut être endommagé, consulter votre revendeur.
ERROR 3	Ce message d'erreur est affiché pendant la lecture en mode de changeur CD lorsque la mise au point du cepteur est incorrecte à cause de rayures sur le disque, etc. →Vérifier le disque dans le magasin.
ERROR 6	Ce message d'erreur est affiché lorsque le disque dans le magasin a été inséré à l'envers. →Vérifier le disque dans le magasin.

※ Lorsque le message d'erreur affiché sur votre appareil n'est pes celui énuméré ci-dessus, consulter votre revendeur pour le décoder.

English

Français

5. FEATURES/CARACTERISTIQUES

English

Français

TUNER

- RDS (Radio Data System): PI (Programme Identification), AF (Alternative Frequency), TP (Traffic Programme Identification), PTY (Programme Type), TA (Traffic Announcement), PS (Programme Service Name), REG (Regional Selection), EON (Enhanced Other Networks), CT (Clock Time and Date Signal), MS (Music/Speech Function)
- Electronic Quartz-Locked PLL Tuning
- One-Touch Memory (16 FM, 6 MW/LW)
- Tuning Modes: Manual Tuning and Station Seek in both directions
- Preset Scan (PS) & Auto Store (AS) on FM/MW/LW
- DX/Local Switch
- Super SASC II (Signal Actuated Stereo Control) & CZ1 Noise Canceller
- Adjustable DK Level

TAPE SECTION

- Auto Reverse with Dual Azimuth Adjustment Mechanism
- Electronic Servo Motor
- Key-Off Pinch Roller Release [CRX97R Only]
- Dolby® B Noise Reduction [CRX97R Only]
- Automatic Programme Control – APC [CRX97R Only]
- Metal (70 μs) Tape Equalization [CRX97R Only]
- Hard Permalloy Dual-Gutter Head
- Illuminated Tape Door

AUDIO SECTION

- Muting, Loudness, Fader, Bass/Treble Controls
- 3-Channel Gold-plated RCA Line Level Output [CRX67R 2 Channels only]
- Maximum Power Output: 4×30 W

GENERAL

- CD Changer Control
- Night Illumination with Dual Colour Selector (Amber/Green)
- Triggered Phone Mute
- Power Antenna Activator
- Multi-Mode LCD Display
- Radio/Tape/CD Changer Mode Selectors
- Fully Detachable Control Panel
- DIN Chassis
- D/A Control
- Blinking Theft-Prevention Indicator

TUNER

- RDS (Système de données radio): PI (Identification de programme), AF (Fréquence alternative), TP (Identification de programme sur la circulation), PTY (Identification du type d'émission), TA (Annonce d'informations sur la circuletion), PS (Nom de la station), REG (Sélection régionale), EON (Commutation automatique aux autres réseaux), CT (Signal d'heure et de date), MS (Fonction musicale/vocale)
- Tuner synthétiseur PLL électronique verrouillée par quartz
- Mémoire à touche par effleurement pour 18 stations FM/6 stations PO/GO
- Modes de syntonisation: syntonisation manuelle et automatique par recherche dans les deux sens
- Passage en revue automatique des stations présélectionnées (PS) & stockage automatique de station (AS) sur les gammes FM/PO/GO
- Commutateur DX/local
- (Commande stéréo activée par un signal) Super SASC II & suppresseur de parasites CZ1
- Niveau DK réglable

SECTION CASSETTE

- Auto-reverse avec mécanisme d'ajustement bidirectionnel de l'azimut
- Servo-moteur électronique
- Dégagement du galet presseur lié à la clé de contact [CRX97R seulement]
- Réduction de bruit Dolby® B [CRX97R seulement]
- Recherche automatique des programmes (APC) [CRX97R seulement]
- Egalisation de bande métal (70 μs) [CRX97R seulement]
- Tête en Permalloy rigide à double entrefer
- Trappe à cassette éclairée

SECTION AUDIO

- Commandes de sourdine, compensation physiologique, fader, commandes de graves/aiguës
- Sorties de niveau de ligne RCA plaquées or à 3 canaux [CRX87R 2 canaux seulement]
- Puissance de sortie maximale: 4×30 W

SECTION GENERALE

- Centrôleur de changeur CD
- Eclairage de nuit avec sélecteur bicolore (ambré/vert)
- Sourdine audio déclenchée pour téléphone mobile
- Activateur d'antenne électrique
- Affichage à cristaux liquides (LCD) multi-mode
- Sélecteurs de modo radio/cassette/changeur CD
- Clavier de commande entièrement amovible
- Châssis DIN
- Commande N/A
- Indicateur anti-vol clignotant

6. SPECIFICATIONS/SPECIFICATIONS

English

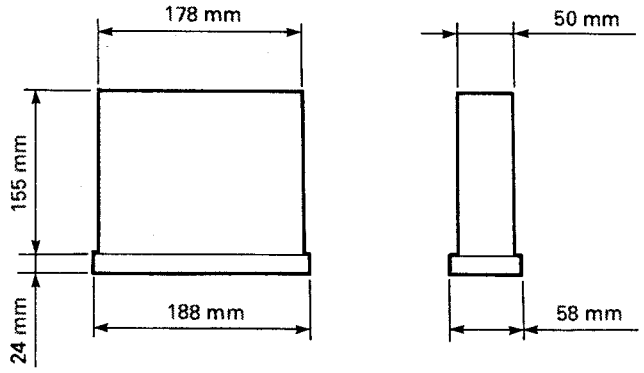
Français

RADIO SECTION
Tuning System: PLL synthesizer tuner
Receiving Frequencies:
FM: 87.5 to 108 MHz (0.05 MHz steps)
MW: 531 to 1,602 kHz (9 kHz steps)
LW: 153 to 279 kHz (1 kHz steps)

TAPE DECK SECTION
Playback System:
Auto Reversing, 4-track, 2-channel stereo cassette tape playback
Monaural also possible

GENERAL
Power Supply Voltage:
DC 14 V (10.8 to 15.6 V allowable), negative ground
Power Consumption: Less than 10 A
Speaker Impedance: 4Ω (4 to 8 Ω allowable)
Auto Antenna Rated Current: 0.5 A or less
Weight: 1.3 kg

Dimensions:



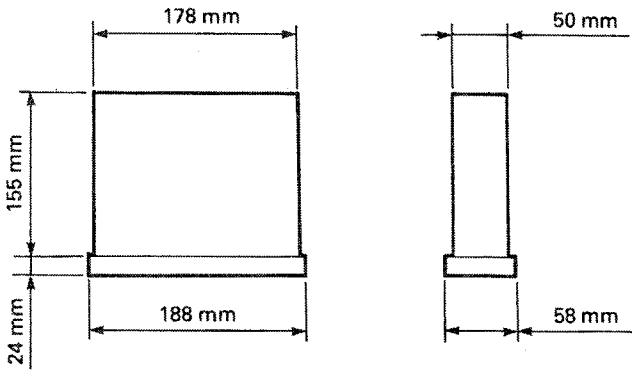
Note:
- Short-circuiting the power antenna terminal or using a power antenna with a current exceeding the rated current can damage internal circuits. Always use with the rated current.
- Specifications and the design are subject to change without notice for further improvement.

SECTION RADIO
Système de syntonisation:
Tuner synthétiseur PLL
Fréquences de réception:
FM: 87,5 à 108 MHz (par pas de 0,05 MHz)
PO: 531 à 1602 kHz (par pas de 9 kHz)
GO: 153 à 279 kHz (par pas de 1 kHz)

SECTION MAGNETOCASSETTE
Système de lecture:
Lecture de cassettes stéréo, 2 canaux, 4 pistes avec inversion automatique
Lecture monaurale également possible

DONNEES GENERALES
Tension d'alimentation:
14,4 V (10,8 V à 15,6 V admissible), négative à la masse
Consommation: Moins de 10 A
Impédance de haut-parleur:
4Ω (4 à 8Ω admissible)
Tension nominale d'antenne auto: 0,5 A max.
Poids: 1,3 kg

Dimensions:



Remarque:
- Le fait de mettre en court-circuit la borne d'antenne électrique ou d'utiliser une antenne électrique d'une tension dépassant la tension nominale risque d'endommager les circuits internes. Respecter toujours la tension nominale.
- Les caractéristiques techniques et l'aspect peuvent être modifiés sans avis préalable, dans un but d'amélioration.

»DECLARATION OF CONFORMITY«

We, Muuutucturer/Importer
(Full address)

Clarion Europa GmbH
Mergenthaler Allee 19-21
6236 Eschborn-Frankfurt/Main

Declure thut the product
(Description of the apparatus to which it refers)

Carradio with Cassetten-Player
CRX97R (PE-9807A)

Is in centermity with
(reference to the specifications under which conformity is declared)

- [x] **Decree BMPT 100 / 1991** General permission of Sound- and TV-receivers
- [ ] **EN 55012** Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment
- [ ] **EN 59020** Immunity from radio interference of broadcast receivers and associated equipment

Which mark may be affixed:

- [ ] **ZZF mark** (Z G / Z / F)
- [ ] **CE mark** (EC conformity mark)
- [x] **No mark**

Manufacturer / Importer
Date: Feb. 26/1993
CLARION EUROPA GMBH
Mergenthaler Allee 19-21
D-8236 Eschborn
Signature:

Authorized Test - Lab
Date: Feb. 26/1993
electronic GmbH
Ohmstraße 1
D-8316 Frontenhausen
TA 08732/8761
Signature:

Ref. No.

»DECLARATION OF CONFORMITY«

We, Muuutucturer/Importer
(Full address)

Clarion Europa GmbH
Mergenthaler Allee 19-21
6236 Eschborn-Frankfurt/Main

Declure thut the product
(Description of the apparatus to which it refers)

Carradio with Cassetten-Player
CRX87R (PE-9806A)

Is in centermity with
(reference to the specifications under which conformity is declared)

- [x] **Decree BMPT 199 / 1991** General permission of Sound- and TV-receivers
- [ ] **EN 55013** Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment
- [ ] **EN 55920** Immunity from radio interference of broadcast receivers and associated equipment

Which mark may be affixed:

- [ ] **ZZF mark** (Z G / Z / F)
- [ ] **CE mark** (EC conformity mark)
- [x] **No mark**

Manufacturer / Importer
Date: Feb. 26/1993
CLARION EUROPA GMBH
Mergenthaler Allee 19-21
D-6238 Eschborn
Signature:

Authorized Test - Lab
Date: Feb. 26/1993
electronic GmbH
Ohmstraße 1
D-8316 Frontenhausen
TA 08732/8761
Signature:

Ref. No.

Clarion Co.,Ltd.

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